SECTION 4D

Inpatient rehabilitation facility services

RECOMMENDATION

The Congress should eliminate the update to payment rates for inpatient rehabilitation facility services for fiscal year 2007.

COMMISSIONER VOTES: YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

SECTION 4D

Inpatient rehabilitation facility services

Section summary

The Medicare Payment Advisory Commission (MedPAC) assesses the adequacy of payment for inpatient rehabilitation facilities (IRFs) and recommends an update to the prospective payment system (PPS) payment rates for the coming year for the first time. IRFs provide intensive rehabilitation services—such as physical, occupational, or speech therapy—in an inpatient setting. Beneficiaries generally must be able to tolerate and benefit from three hours of therapy per day to be eligible for treatment in an inpatient rehabilitation facility. Medicare is the principal payer for IRF services, accounting for about 70 percent of discharges. Medicare payments to inpatient rehabilitation facilities were $6 billion in 2004.

An important issue affecting IRFs is CMS's 2004 modification of the 75 percent rule, which requires IRFs to have 75 percent of admissions with one or more of a specified list of conditions. To clarify arthritis conditions CMS thought appropriate for treatment in IRFs, the modification removed the condition for the largest category of IRF

In this section

admissions from the list and substituted three more precise conditions. At the same time CMS modified the 75 percent rule, it created a four-year transition. This change in policy is one factor that reduced the volume of patients admitted to IRFs in 2005.

We have a mix of data for examining payment adequacy. Some data go up to 2004, before the new 75 percent rule, and patient assessment data provide a preliminary examination of 2005, the first year of the phase-in of the new rule.

To assess payment adequacy, we examine six factors for changes that can be attributed to the adequacy of Medicare payments for inpatient rehabilitation facilities. The factors we examine are:

- ***Access to care***—We have no direct indicators of beneficiaries' access to IRF care and analysis is complicated because IRFs provide a specialized service and determining who needs intensive rehabilitation in an inpatient setting is difficult. Until the new 75 percent rule was implemented, IRFs' patient volume increased, but it has decreased in 2005, as discussed below. If patients who need intensive rehabilitation are still getting it, the drop in volume may not be an access issue. Moreover, patients no longer treated in an IRF can receive care in other settings, such as outpatient, home health, or skilled nursing facilities. However, we are unable to judge whether patients are treated in the appropriate setting.
- ***Supply of facilities***—The number of inpatient rehabilitation facilities increased 4 percent from 2000 to 2001, before implementation of the PPS, and grew 2 percent per year from 2002 to 2004, following PPS implementation. This slower growth applies to all types of IRFs, whether they are freestanding, hospital-based, or located in urban or rural areas.

- ***Volume of services***—Trends in volume that began before the implementation of the per discharge PPS—increasing number of cases and declining length of stay—tended to persist in the first year after implementation. Since introduction of the new 75 percent rule in 2005, however, volume has dropped an estimated 9 percent (eRehabData® 2005) to 14 percent (MedPAC analysis of IRF–Patient Assessment Instrument (IRF–PAI) data) and the average length of stay has increased due to the drop in volume of cases, primarily cases with a shorter length of stay.
- ***Quality***—Evidence suggests that quality has remained steady under the PPS. Patients are making similar gains in their ability to function (e.g., walk, bathe) in 2004 compared with 2002.
- ***Access to capital***—Inpatient rehabilitation facilities appear to have adequate access to capital. Eighty percent of IRFs are hospital-based and have access to capital through their parent institutions, which have good access (see Section 2A).
- ***Payments and costs***—Total Medicare spending increased at a faster pace post-PPS (15 percent per year from 2002 to 2004) compared with pre-PPS (3 percent from 2000 to 2001). Higher spending was due primarily to a combination of payment updates and case-mix changes that may have been at least partly due to coding improvement. The IRF Medicare margin was 16.3 percent in 2004. Our estimate of the margin for 2006 is 9.2 percent, with the reduction tied to implementation of the new 75 percent rule.

The number of IRFs entering the Medicare program increased following PPS implementation, quality has remained stable, and IRFs appear to have good access to capital. Until recently, inpatient rehabilitation facilities experienced an increase in the number of patients and spending. Our indicators of payment adequacy are generally positive, although we see reduced admissions for the industry due to the new 75 percent rule. This new rule narrowed the categories considered to be appropriate for IRFs.

The effect was to reduce the number of cases, which impacts Medicare margins. However, we estimate margins will remain more than adequate.

Our analysis of payment adequacy suggests that IRFs can accommodate changes in input costs over the coming year without an increase in payments. Therefore, we recommend that the Congress should eliminate the update to payment rates for inpatient rehabilitation facility services for fiscal year 2007. ■

Recommendation 4D

COMMISSIONER VOTES:
YES 15 • NO 0 • NOT VOTING 0 • ABSENT 2

The Congress should eliminate the update to payment rates for inpatient rehabilitation facility services for fiscal year 2007.

Background

After an illness, injury, or surgery, some patients receive intensive rehabilitation services—such as physical, occupational, or speech therapy—in an inpatient setting. Relatively few Medicare beneficiaries use intensive rehabilitation therapy because they generally must be able to tolerate and benefit from three hours of therapy per day to be eligible for treatment in an inpatient rehabilitation facility (IRF). IRFs may be freestanding hospitals or specialized, hospital-based units.

Medicare is the principal payer for IRF services, accounting for about 70 percent of discharges. Medicare payments to inpatient rehabilitation facilities were $6 billion in 2004 and represent about 2 percent of total Medicare spending.

The most common rehabilitation condition for Medicare beneficiaries in 2004 was joint replacement, followed by stroke and hip fracture (Figure 4D-1). These three conditions make up about half of IRF cases.

To qualify as an IRF for Medicare payment, facilities must meet the Medicare conditions of participation for acute care hospitals and must meet all of the following additional criteria:

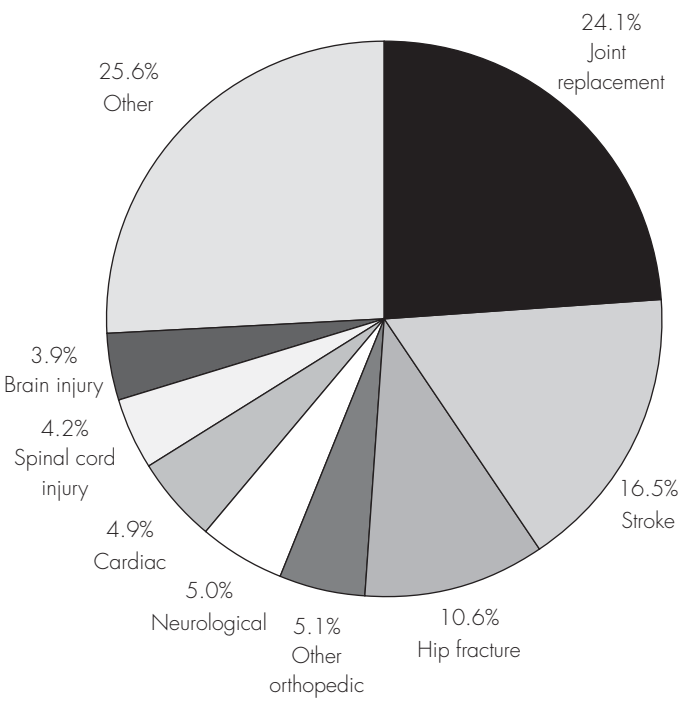
- have a preadmission screening process to determine that each prospective patient is likely to benefit significantly from an intensive inpatient rehabilitation program;
- have close medical supervision by a physician with experience or training in rehabilitation;
- have a director of rehabilitation, with training or experience in rehabilitation of patients, who provides services in the facility on a full-time basis;[1]
- provide 24-hour rehabilitation nursing;
- use a coordinated multidisciplinary team approach;
- expect significant practical improvement for patients;
- have realistic goals for treatment aims; and
- each year, have no fewer than 75 percent of all patients admitted with 1 or more of 13 specified conditions, such as stroke or burns.

For 20 years, from 1984 to 2004, the diagnoses included in the last criterion, known as the 75 percent rule, remained constant. These diagnoses were also known as the Healthcare Financing Administration–10 (HCFA–10) (Figure 4D-2, p. 230).[2] In 2002, CMS discovered that fiscal intermediaries were using inconsistent methods to enforce the 75 percent rule. As a result, CMS suspended enforcement of the rule until the agency could examine it and determine whether the regulation should be modified.

In 2004, CMS redefined arthritis conditions it thought appropriate for treatment in IRFs by removing from the 75 percent rule the condition for the largest category of IRF admissions and substituting three more precise conditions. This change contributed to the reduction in the volume of patients admitted to IRFs. CMS excluded polyarthritis, which was used previously as the diagnosis for admitting patients with single joint replacements to IRFs. Patients with lower extremity joint replacements accounted for the largest share of inpatient rehabilitation facility cases in 2004—24 percent. Instead of polyarthritis, CMS substituted three arthritis conditions limited to cases where

FIGURE 4D–1

Distribution of most common types of cases in inpatient rehabilitation facilities, 2004

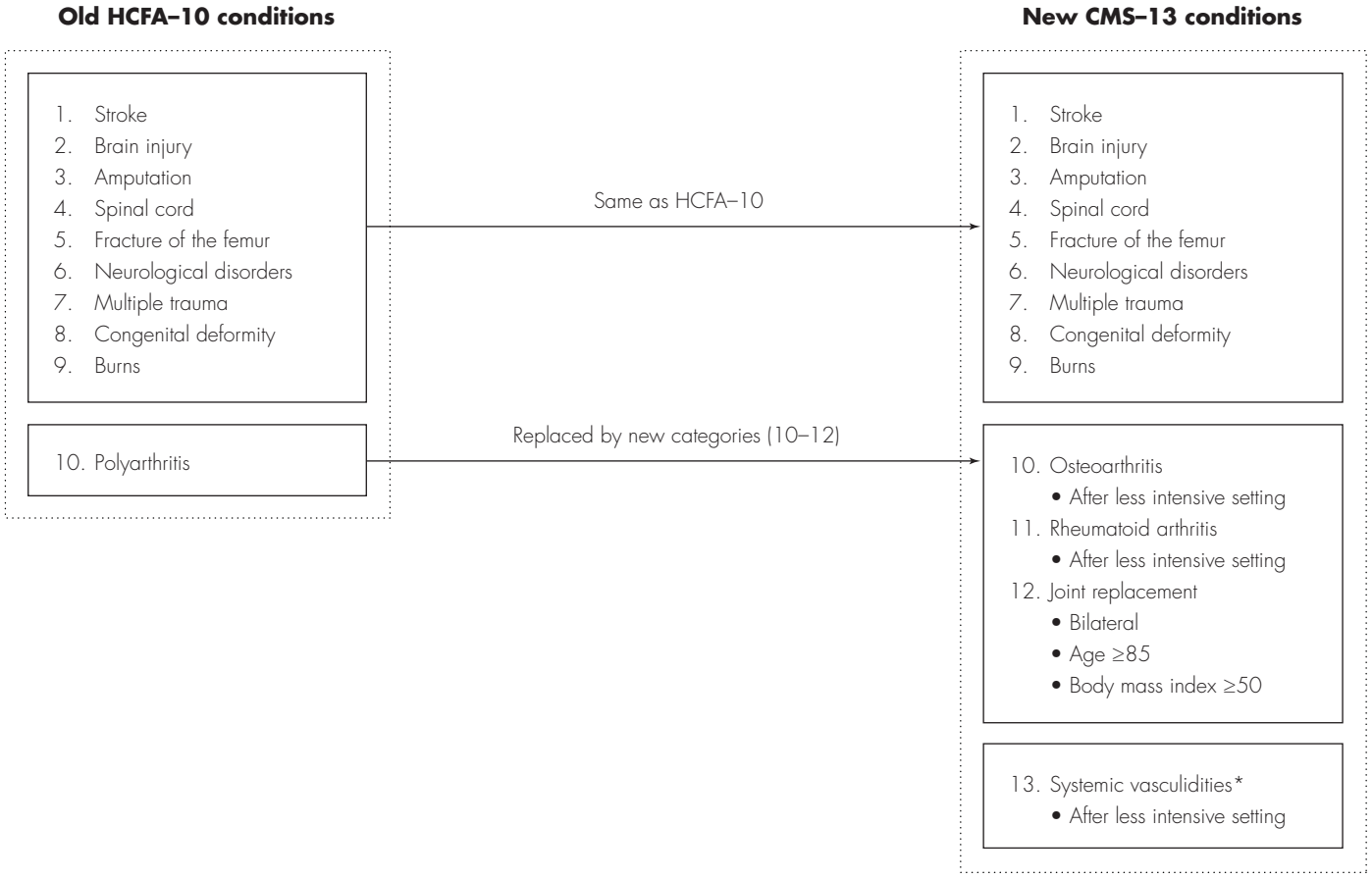


Note: Other includes conditions such as amputation, pain syndrome, and pulmonary.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

FIGURE 4D–2

Change in the inpatient rehabilitation facility criteria



Note: HCFA–10 (Health Care Financing Administration–10).
*Systemic vasculidities are relatively rare inflammations of the arteries, frequently autoimmune, that involve a variety of systems, including joints.

appropriate, aggressive, and sustained outpatient therapy had failed in other settings. The agency also included joint replacements in the list of appropriate conditions when both knees or hips are replaced in surgery immediately preceding the IRF admission, when the patient's body mass index equals or is greater than 50, or when the patient is age 85 or older. The 75 percent rule allows inpatient rehabilitation facilities to admit 25 percent of cases without the specified diagnoses, so IRFs may treat some cases with diagnoses not compliant with the rule without financial penalty. Inpatient rehabilitation facilities that do not comply with the threshold are declassified and paid acute hospital rates for all patients in the next cost reporting period.[3]

CMS created a four-year transition period for compliance with the new 75 percent rule. The Deficit Reduction Act of 2005 modified the transition. The final policy is:

- 50 percent of the IRF's total patient population must meet the new regulations in cost reporting years beginning on or after July 2004,
- 60 percent in cost reporting years beginning on or after July 2005 through June 2007,
- 65 percent in cost reporting years beginning on or after July 2007.[4]

For cost reporting periods beginning on or after July 2008, the threshold returns to 75 percent.

The Commission commented twice in response to CMS's rulemaking for the new 75 percent rule for IRFs. We noted that we appreciated CMS's efforts to try to distinguish the services provided in different post-acute care settings and recommended that the agency convene an expert panel of clinicians to reach consensus on diagnoses to be included in the new 75 percent rule as well as appropriate clinical criteria for patients within the respective diagnoses. We also suggested that CMS publicly report the results of the panel. CMS has not yet convened an expert panel.

In 2004, for the first time, CMS also issued program memoranda to fiscal intermediaries that contained a list of specific International Classification of Diseases, Ninth Revision, Clinical Modification (ICD–9–CM) codes considered compliant with the conditions specified in the new 75 percent rule (CMS 2004). This list excludes some diagnoses that appear to be compliant, based on the conditions allowed under the rule. For example, while the 75 percent rule states that patients with amputations are considered compliant, the diagnoses codes for fingers, toes, and foot amputations are noncompliant. Spinal stenosis and injury to nerve roots and spinal plexes also are noncompliant based on the list of ICD–9–CM codes, although spinal cord issues are listed as compliant in the 75 percent rule.

The new 75 percent rule is controversial. Even though a 75 percent rule has been in place since 1984, CMS has not consistently enforced it, as noted earlier. CMS says that the rapid growth in single lower extremity joint replacement cases caused the agency to begin examining the polyarthritis diagnosis. CMS concluded that most joint replacement patients did not need the intensive rehabilitation services provided by IRFs and could receive them instead from alternative providers, such as acute hospitals, skilled nursing facilities, long-term care hospitals, outpatient rehabilitation providers, or home health agencies.

A key issue has been whether diagnoses alone are enough to predict need for IRF-level care. The Government Accountability Office (GAO) (2005) studied the clinical appropriateness of the new 75 percent rule and determined that condition alone was insufficient for identifying appropriate types of patients for inpatient rehabilitation facilities. GAO suggested that additional criteria (such as functional status) be used to identify patients appropriate for IRFs and to classify these facilities, especially since not all patients with a given diagnosis require intensive rehabilitation.

The new rule is also controversial because it clarifies that a large category of admissions is not appropriate for IRF care. IRFs not in compliance with the new rule will be declassified and paid acute inpatient prospective payment system rates for all cases. For example, for beneficiaries who have had a stroke, the acute inpatient rate in 2006 would be $4,010 while the IRF rate would range from $8,104 to $33,516, depending on the age, functional status, and cognitive status of the stroke patient.

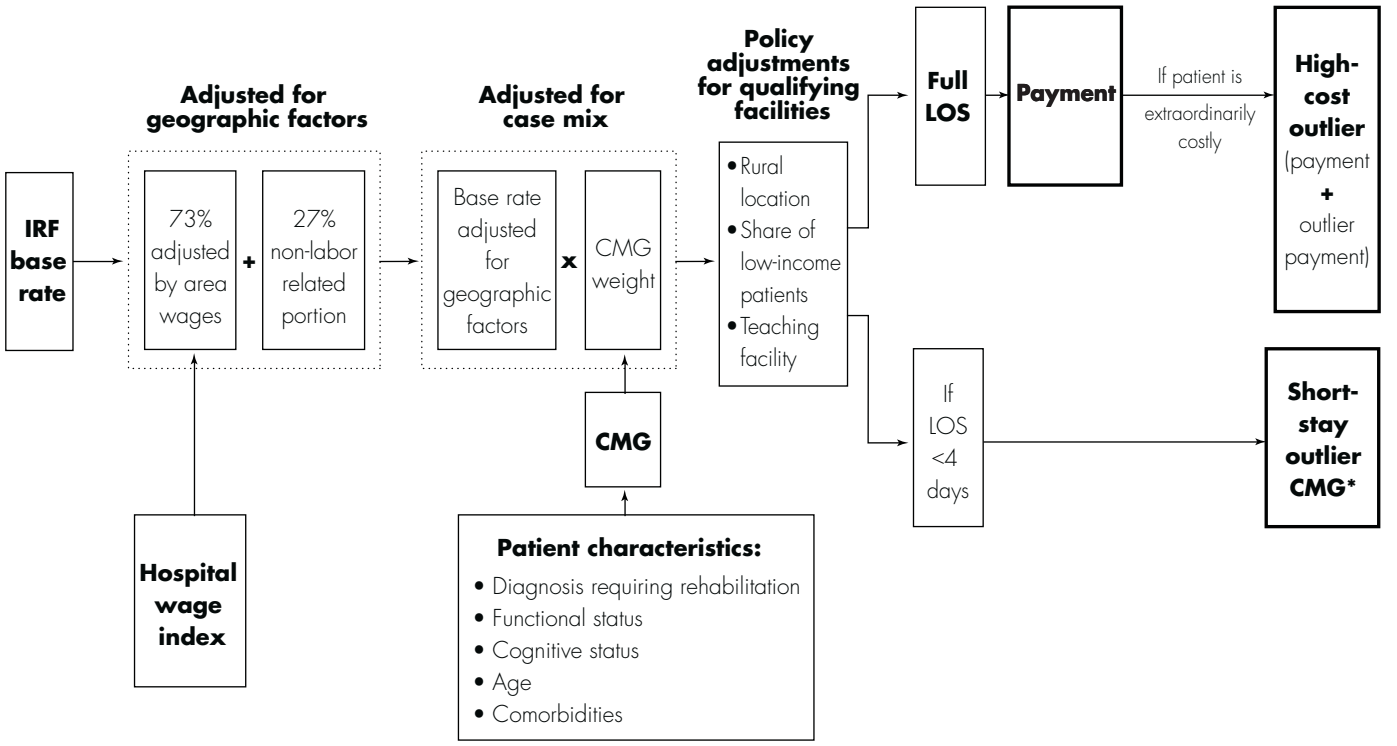
Prospective payment system for IRFs

Beginning in January 2002, Medicare pays inpatient rehabilitation facilities predetermined per discharge rates based primarily on patient characteristics, the facility's wage index, and facility characteristics. Before January 2002, Medicare paid IRFs under the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), on the basis of their average costs per discharge, up to an annually adjusted facility-specific limit. As of 2004, these facilities are paid entirely at prospective payment system (PPS) rates.

The inpatient rehabilitation facility PPS bases payment on discharges. Patients are assigned to one of more than 300 case-mix groups (CMGs) based on their characteristics—a diagnosis that requires rehabilitation, functional status, cognitive status, age, and comorbidities—as recorded in the IRF patient assessment instrument. To calculate a rate, the base rate ($12,762 for fiscal year 2006) is geographically adjusted by the facility's area wage index (Figure 4D-3, p. 232). This geographically adjusted base rate is then adjusted for case mix—multiplied by the relative weight for the CMG—to create the payment rate. Weights range from 0.4596 to 3.4784 for fiscal year 2006 payments. For an IRF with a wage index of 1.0, rates range from $5,868 to $44,409. Payments are also increased for facilities in rural areas, teaching institutions, and for the proportion of low-income patients treated. IRFs receive additional payments for patients that are high-cost outliers. Medicare pays inpatient rehabilitation facilities special lower rates for patients who have very short stays (fewer than four days) or who die in an IRF.

FIGURE 4D–3

Inpatient rehabilitation facility prospective payment system



Note: IRF (inpatient rehabilitation facility), CMG (case-mix group), LOS (length of stay).
*IRFs with a wage index of 1.0 are paid $2,809 for short-stay outliers.

Are Medicare payments adequate in 2006?

We examine the following factors for changes that can be attributed to the adequacy of Medicare payments to IRFs:

- access to care
- supply of facilities
- volume of services
- quality
- access to capital
- payments and costs

Our indicators of payment adequacy are generally positive although we have no standard with which to directly assess beneficiaries' access to IRF care. Our most recent data show inpatient rehabilitation facilities entering the Medicare program. The volume of discharges and the number of beneficiaries using these facilities increased until 2004, with the volume of cases decreasing in 2005. IRFs also appear to have good access to capital. IRFs' Medicare margins were 16.3 percent in 2004 and we estimate 2006 margins to be 9.2 percent under the Deficit Reduction Act of 2005. Overall, our analysis finds payments for inpatient rehabilitation facilities are more than adequate.

Changes in access to care

Unlike for home health care or physicians, we have no direct indicators of beneficiaries' access to IRF care. Our analysis is complicated because IRFs provide a specialized service. Clinical appropriateness—who needs intensive rehabilitation in an inpatient setting—is an issue because rehabilitation can be provided less expensively in other settings.

Beneficiaries' use of IRFs grew until the new 75 percent rule was implemented. However, the industry now is going through a major change in the patients they see. In the first

TABLE 4D–1

Change in types of cases in inpatient rehabilitation facilities

Type of case	2004 cases	Difference in cases, 2005 v. 2004	Percentage change
Nontraumatic brain injury	5,662	938	16.6%
Neurological	12,200	588	4.8
Traumatic brain injury	3,818	434	11.4
Burns	182	2	1.1
Guillain–Barré	345	–16	–4.6
Multiple major trauma with brain or spinal cord injury	528	–39	–7.4
Traumatic spinal cord injury	1,378	–51	–3.7
Amputation, upper extremity	647	–251	–38.8
Amputation, lower extremity	6,578	–516	–7.8
Multiple major trauma no brain or spinal cord injury	2,762	–717	–26.0
Nontraumatic spinal cord injury	8,984	–724	–8.1
Stroke	41,793	–780	–1.9
Hip fracture	32,629	–938	–2.9
Rheumatoid arthritis	2,655	–1,007	–37.9
Pain syndrome	4,925	–1,488	–38.2
Pulmonary	5,896	–1,667	–28.3
Other orthopedic	13,007	–1,786	–13.7
Osteoarthritis	4,879	–2,941	–60.3
Cardiac	14,072	–4,126	–29.3
Miscellaneous	32,077	–8,096	–25.2
Joint replacement	61,563	–13,439	–21.8
Total	256,580	–36,620	–14.3

Note: Cases are defined by case-mix group.

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

year of the new rule, volume fell.[5] This drop in volume may not indicate an access problem if patients who need IRF-level care are still getting it. However, we are unable to judge this.

CMS's intention in changing the 75 percent rule was to narrow the categories considered to be appropriate for IRFs. The effect was to reduce the number of cases. IRF admissions of patients with joint replacements decreased by 22 percent in 2005 (Table 4D-1).

Changes in supply of facilities

We examined growth in the supply of inpatient rehabilitation facilities before (2000–2001) and after the implementation of the PPS (2002–2004). The number of IRFs rose more slowly following PPS implementation than in the years before the prospective payment system under TEFRA (Table 4D-2, p. 234). This slower growth after the PPS applies to all types of IRFs, whether they are freestanding, hospital-based, or located in urban or rural areas.

The number of for-profit and government-owned IRFs also rose more slowly after the PPS than before its implementation. Nonprofit IRFs grew at a slower pace and the pattern of growth was different from for-profit and government-owned inpatient rehabilitation facilities: The number of nonprofit IRFs did not increase from 2000 to 2001, and rose at 1 percent after the PPS. In contrast, for-profit IRFs grew at 13 percent under TEFRA and 3 percent after the PPS.

TABLE 4D–2 **The number of all types of inpatient rehabilitation facilities has grown**

Type of IRF	TEFRA 2000	TEFRA 2001	PPS 2002	PPS 2003	PPS 2004	Change 2000–2001	Annual change 2002–2004	Annual change 2000–2004
All IRFs	1,117	1,157	1,188	1,211	1,227	4%	2%	2%
Urban	950	971	988	1,001	1,009	2	1	2
Rural	167	186	200	210	218	11	4	7
Freestanding	195	214	215	215	217	10	0	3
Hospital-based	922	943	973	996	1,010	2	2	2
Nonprofit	731	733	755	765	772	0	1	1
For profit	240	271	277	290	294	13	3	5
Government	146	153	156	156	161	5	2	2

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of Provider of Service information from CMS.

Changes in the volume of services

Trends in volume that began before implementation of the PPS tended to persist after the PPS implementation. However, the change in the 75 percent rule seems to have stopped these trends. The average length of stay (ALOS) was decreasing before the PPS was implemented in 2002 (Table 4D-3). The ALOS continued to go down (albeit at a slower rate) from 2002 to 2004. Preliminary evidence for 2005, not shown in the table, indicates that length of stay rose to 13.8 days, about 3 percent, due to a change in patient mix resulting from the new 75 percent rule and consistent with less intensive patients receiving rehabilitation elsewhere. Patients with one of the conditions listed in the rule have a much higher case-mix index compared with patients without a condition listed in the rule (1.34 versus 0.93).

The number of Medicare admissions to inpatient rehabilitation facilities increased by 8 percent under TEFRA between 2000 and 2001. Medicare admissions grew more slowly from 2002 to 2004, following PPS implementation—6 percent per year. Preliminary evidence for 2005 suggests that the number of Medicare discharges decreased an estimated 9 percent (eRehabData® 2005) to 14 percent (MedPAC analysis of IRF–Patient Assessment Instrument (IRF–PAI) data) after the new 75 percent rule phase-in began (not shown in Table 4D-3).[6]

IRFs have increased admissions of beneficiaries with some specified conditions considered compliant with the listing of conditions in the 75 percent rule, such as traumatic and nontraumatic brain injury, and reduced admissions of beneficiaries who have other conditions considered compliant (Table 4D-1, p. 233). During the first half of 2005, compared with the same period in 2004 (before the rule changed), the number of beneficiaries with amputations of upper extremities admitted to IRFs decreased about 39 percent, and the number of patients with multiple major trauma (no brain or spinal cord injury) decreased about 26 percent. These latter declines are unexpected. The reason for the reductions in admissions of cases still compliant with the 75 percent rule is unclear. The new CMS list of compliant ICD–9–CM codes may have been a contributor or acute care hospitals and IRFs may have misunderstood the new 75 percent rule. Nevertheless, decreases in patients with apparently compliant conditions raise questions, suggesting a need for more research and monitoring.

Change in quality

Our indicators of the quality of care provided by IRFs under the PPS show little change. To assess changes, we use a measure commonly tracked by the industry: the difference between discharge and admission scores for the commonly used Functional Independence Measure (FIM™), incorporated in the IRF–PAI. The 18-item FIM™ measures level of disability in physical and cognitive functioning and burden of care for patients' caregivers (Deutsch et al. 2005). Scores for each item

TABLE 4D–3

Volume of cases and Medicare spending increased under the IRF prospective payment system

	TEFRA			PPS			
	2000	2001	Change 2000–2001	2002	2003	2004	Average annual change 2002–2004
Number of cases	384,207	415,579	8%	438,631	478,723	496,695	6%
Medicare spending	$3.6 billion	$3.7 billion	3	$4.5 billion	$5.7 billion	$6.0 billion	15
Payment per case	$10,312	$9,982	–3	$11,152	$12,952	$13,275	9
Length of stay (in days)	14.6	14.0	–4	13.3	12.8	12.7	–2

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of MedPAR data from CMS.

range from one (independence) to seven (complete dependence). The actual differences in scores are less important in this case than whether the items are stable, increasing (indicating improvement), or decreasing (indicating deterioration). To compare quality on a national basis, we use the average difference in FIM™ at discharge versus admission for Medicare patients in two ways (Figure 4D-4):

- for all Medicare patients treated in an IRF, and
- for Medicare patients discharged home from an IRF.[7]

We find that differences are stable from 2002 to 2004, suggesting that quality has not deteriorated under the PPS.

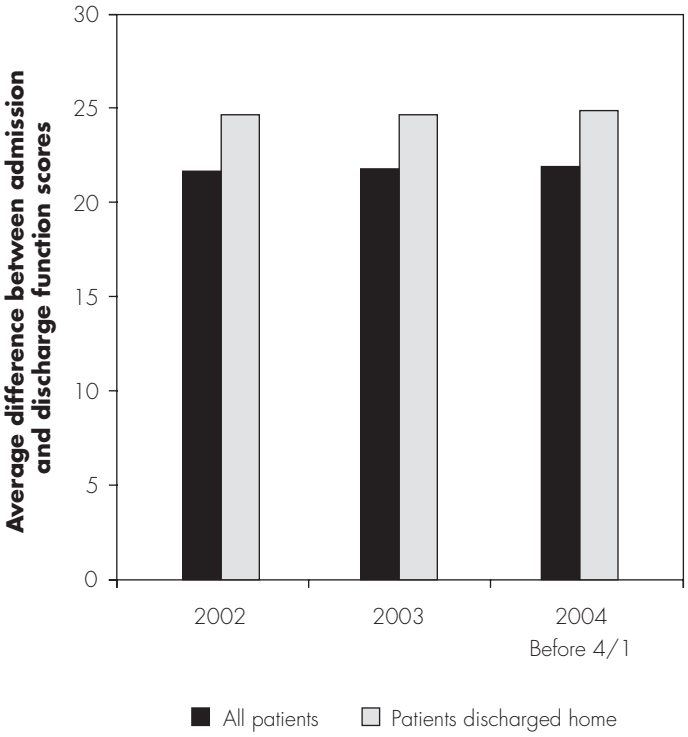
We use a summary score for comparing functional improvement. In the future, the Commission and CMS might want to investigate whether using more detail to compare admission and discharge function scores might provide more information about quality of care. For example, comparing scores by case-mix group may be another way of examining the quality of IRF care.

CMS also has begun a process to develop outcomes measures from the IRF–PAIs. A forthcoming CMS report will:

- review the literature,
- consider the appropriateness of existing measures,

FIGURE 4D–4

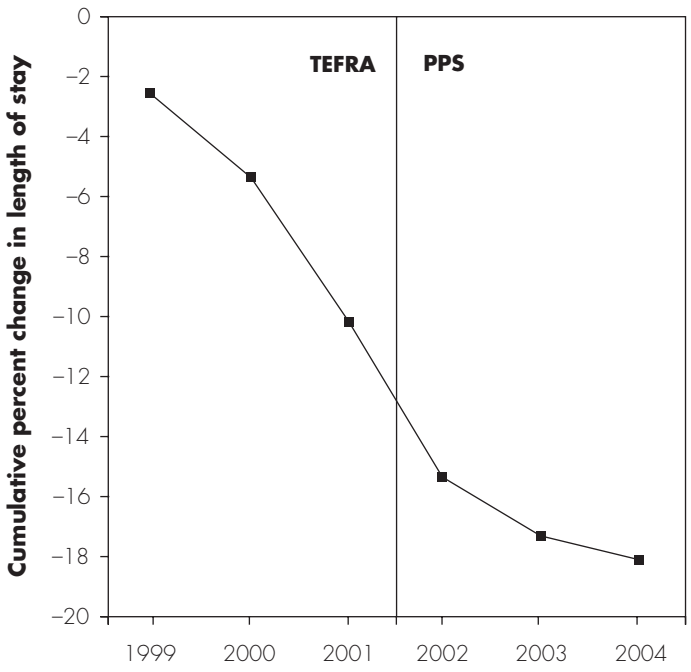
IRF patients' improvement in function has remained stable



Note: IRF (inpatient rehabilitation facility).

Source: MedPAC analysis of Inpatient Rehabilitation Facility–Patient Assessment Instrument data from CMS.

FIGURE 4D–5 **IRFs' length of stay has declined**



Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of cost report data from CMS.

- assess the completeness of voluntary IRF–PAI items,
- report the results from a pilot test of items in nine IRFs,
- model risk adjustment for the measures, and
- recommend next steps.

The Commission will monitor the agency's work and consider including any measures CMS develops among our measures of quality.

IRFs' access to capital

IRFs appear to have adequate access to capital. Four out of five IRFs are hospital-based units and have access to capital through their parent institution. Because acute hospitals generally have good access to capital, we expect that their IRF units do as well. (See discussion of hospitals' access to capital in chapter 2A.)

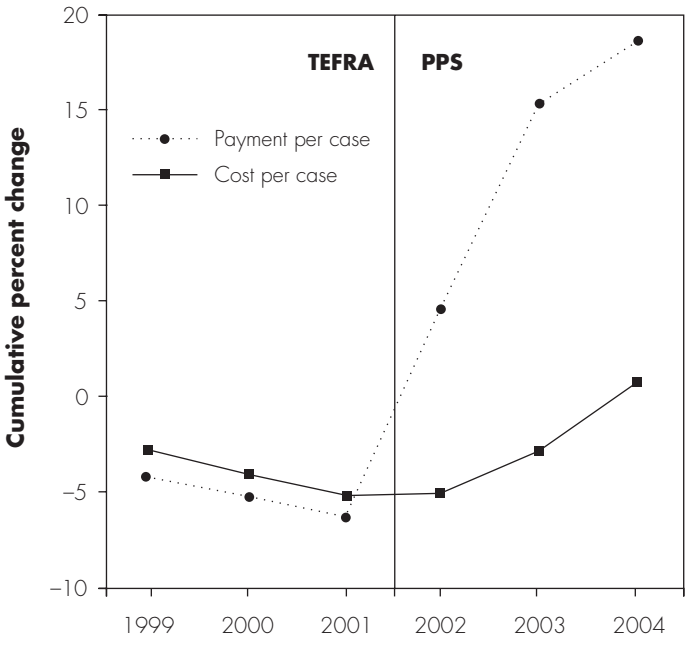
Capital appears to be available for freestanding IRFs as well. For example, a new company has obtained $40 million in private equity funding and announced plans to build 36 IRFs throughout the western states over the next 5 years, starting in cities that currently have no IRFs (*New Mexico Business Weekly* 2004).

A large chain that owns one-third of the freestanding IRFs may represent a special situation with respect to access to capital because of lawsuits over accounting issues (*Birmingham Business Journal* 2004). This company was headed toward bankruptcy but was able to avoid filing for bankruptcy. It reported restated financial figures for 2001 to 2003 showing positive cash flow and growth in revenue from $1.5 billion in 2001 to $2 billion in 2003 for a consistent group of its IRFs (HealthSouth 2005). These positive changes appear to be a result of the IRF PPS. Recently, some stock market analysts have recommended buying the chain's stock (Stifel Nicolaus 2005), which also suggests that freestanding IRFs have access to capital.

Payments and costs

The last component of our update framework examines changes in payments and costs. We find that payments

FIGURE 4D–6 **Payments have risen faster than costs, post-PPS**



Note: TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of cost report data from CMS.

TABLE 4D–4 **Inpatient rehabilitation facilities' Medicare margins, by group, 1998–2004**

	TEFRA				PPS		
IRF group	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**
All IRFs	2.9%	1.1%	1.3%	1.5%	11.1%	17.7%	16.3%
Urban	2.9	1.1	1.3	1.5	11.7	18.4	16.9
Rural	2.5	0.9	1.0	1.1	4.6	10.3	10.6
Freestanding	3.3	1.2	1.2	1.5	18.2	23.0	24.2
Hospital-based	2.6	1.1	1.3	1.4	6.7	14.6	12.0
Nonprofit	2.8	1.2	1.5	1.6	6.7	14.3	12.6
For profit	3.1	1.0	0.9	1.3	19.3	24.2	24.4
Government	2.5	0.8	1.2	1.5	1.0	9.5	8.6

Note: IRF (inpatient rehabilitation facility), TEFRA (Tax Equity and Fiscal Responsibility Act of 1982), PPS (prospective payment system).

Source: MedPAC analysis of cost report data from CMS.

and costs increased rapidly following implementation of the PPS, from 2002 to 2004. Total Medicare spending increased more quickly post-PPS than it had before—15 percent versus 3 percent. Payment per case increased after PPS implementation by 9 percent per year, compared with a decrease of 3 percent pre-PPS.

Changes in costs per case, 1998–2004

Reductions in lengths of stay generally are associated with decreases in costs per case. From 1998 to 2004 IRFs reduced average lengths of stay for Medicare patients every year (Figure 4D-5). The length of stay declines, however, slowed somewhat after PPS implementation in 2002.

From 1999 to 2001, Medicare reduced payments to IRFs. During the same period, IRFs reduced their costs per case, consistent with the incentives of the TEFRA payment system which paid bonuses to facilities with costs below their limits (Figure 4D-6). With the introduction of PPS, however, we saw a dramatic increase in payments per case—more than 10 percent per year in 2002 and 2003—as facilities transitioned into the IRF PPS. Along with this rapid rise in payments came an increase in costs per case that appears to have lagged the increase in payments by one year; costs increased 2.4 percent in 2003 and 3.6 percent in 2004, about the level of increase in input prices for 2004. Although costs accelerated, payments have far outpaced cost growth. The increases in payments in 2002 to 2004 led to a rapid rise in Medicare margins for IRFs.

Medicare margins 1998–2004

We calculate an aggregate Medicare margin for IRFs for 2004 based on actual data which predate the change in the 75 percent rule. The margin is the difference between Medicare payments and costs, as a percentage of Medicare payments to IRFs. Conceptually, this margin represents profit or the percentage of revenue the providers keep.

IRFs' Medicare margin under TEFRA ranged from 2.9 percent in 1998 to 1.5 percent in 2001 (Table 4D-4). After the PPS was implemented in 2002, we see rapid increases in margins for all IRFs. Freestanding facilities and for-profit IRFs have particularly high margins, over 20 percent.

Some questions about the accuracy of the cost data have been raised. A chain that represents a large part of the IRF industry has had some data issues that could affect the margins for the industry.[8] If this chain's margins were excluded from our calculation, the aggregate IRF margin in 2004 would be about 3 percentage points lower.

Medicare margins for 2006

To project the Medicare margin for 2006, we incorporate policy changes that went into effect between 2004—the year of our most recent data—and 2006, as well as policies (other than the update) scheduled to be in effect in 2007. This method allows us to consider whether current payments would have been adequate under all applicable provisions of current law that IRFs will face in 2007. The policies include:

- for fiscal year 2005, a market basket increase of 3.1 percent;
- for fiscal year 2006, a market basket increase of 3.6 percent, a 1.8 percent increase for change in the outlier policy, and a 1.9 percent decrease in payments to account for coding improvement, for a net increase of 3.4 percent; and
- for 2005 to 2007, the effect of the 75 percent rule.

The policy with the biggest impact on the projected margin over this period is the phase-in of the revised 75 percent rule, modified by the Deficit Reduction Act of 2005, which for IRFs with cost reporting periods beginning on or after July 1, 2006 through June 30, 2007 will require that 60 percent of cases in IRFs must be compliant (the text box describes our methods for accounting for the rule's effect on margins). Taking account of these assumptions, Medicare margins are projected to drop from 16.3 percent in 2004 to 9.2 percent in 2006. If we used less conservative assumptions about volume and cost changes, the Medicare margin could be 3 percentage points higher; with more conservative assumptions, the margin would be 2 percentage points lower.

How should Medicare payments change in 2007?

For IRFs, the update in current law for 2007 is a full market basket update. CMS's latest forecast of the market basket for 2007 is 3.4 percent. However, evidence from the indicators we have examined suggests that IRFs can accommodate the cost of caring for Medicare beneficiaries in 2007 without an increase in the base rate.

Update recommendation

Payments to IRFs are more than adequate to cover increases in costs so no update to payments for fiscal year 2007 is needed.

RECOMMENDATION 4D

The Congress should eliminate the update to payment rates for inpatient rehabilitation facility services for fiscal year 2007.

RATIONALE 4D

The evidence on payment adequacy is generally positive. Until the new 75 percent rule was implemented in 2005, inpatient rehabilitation facilities were entering the Medicare program, maintained a steady quality of care provided to beneficiaries, and had good access to capital. The trends in volume of patients have clearly changed in 2005 but we are unable to judge whether the volume decrease is affecting beneficiaries' access to appropriate care. The Medicare margin for 2006 is estimated to be 9.2 percent under the Deficit Reduction Act of 2005.

IMPLICATIONS 4D

Spending

- This recommendation decreases federal program spending relative to current law by between $50 million and $200 million in one year and less than $1 billion over five years.

Beneficiary and provider

- We do not expect this recommendation to affect providers' ability to provide care to Medicare beneficiaries. ■

Modeling the impact of the revised 75 percent rule

Medicare margins for inpatient rehabilitation facilities (IRFs) are expected to drop, as IRFs reduce the number of patients they treat in order to maintain compliance with the revised 75 percent rule as it phases in. IRFs have a strong incentive to remain compliant because otherwise they will be paid under the acute inpatient prospective payment system (PPS) rather than under the IRF PPS. The 75 percent rule requires that a specific percentage of patients have one or more of the conditions that CMS has determined require intensive therapy. As modified by the Deficit Reduction Act of 2005, that percentage is 50 for cost report periods that begin between July 2004 and June 2005, 60 for periods that begin July 2005 through June 2007, 65 for periods beginning July 2007, and 75 for periods beginning July 2008.

As discussed above, IRFs have reduced the number of Medicare cases they treat by an estimated 9 percent (eRehabData® 2005) to 14 percent (based on MedPAC's analysis of IRF–Patient Assessment Instrument (IRF–PAI) data) in 2005 while remaining compliant with the 50 percent standard. Based on analysis, we assume that facilities would need to lower patient volume by as much as 25 percent total to comply with the 60 percent standard in 2007 if additional patients with qualifying conditions are not admitted (eRehabData® 2005). To be conservative in our estimate of the margin, we have assumed that no such additional patients will be admitted. Arguably, IRFs will have strong incentives to replace lost patients.

We expect IRFs' costs per case to rise in 2007 as facilities spread total costs over fewer patients. Although the cases that comply with the new 75 percent rule have a much higher case-mix index and thus are costlier than cases not on the list of specified diagnoses, we expect payments to generally match the higher costs that result from the higher case mix. However, IRFs will have to spread overhead costs over fewer cases and may not be able to completely adjust their direct patient care costs to reflect the reduced volume.

The net result, based on our assumptions, is that the Medicare margin will drop from 16.3 percent in 2004 to an estimated 9.2 percent in 2006. If discharge volume were to drop by only 20 percent instead of 25 percent, the Medicare margin estimate for 2006 would be 2 to 3 percentage points higher. If, on the other hand, facilities were unable to lower their overhead costs in response to the drop in patient volume, the Medicare margin could be 2 percentage points lower. ■

Endnotes

1 Medical directors for hospital-based units need to be at least half-time.

2 The Health Care Financing Administration (HCFA) was the agency that administered Medicare and the predecessor to CMS.

3 Declassified IRFs that are units in critical access hospitals (CAHs) would be paid CAH rates, which are 101 percent of costs.

4 Facilities establish their own cost reporting periods that are similar to their fiscal years.

5 CMS believes that part of the decrease in cases in 2005 resulted from fiscal intermediaries' local coverage decisions.

6 We use estimates from eRehabData®, an organization that transmits about 20 percent of IRF–PAIs to CMS. To determine whether data from this source are representative of the nation, we compared the distribution of IRF–PAIs among rehabilitation impairment categories (e.g., stroke) with the distribution from the Uniform Data System. We found the distributions to be very similar. In addition, we present a range of estimates of the decline in the number of IRF patients, one from eRehabData® and another from our own estimate based on 100 percent of IRF–PAIs for the first half of 2004 and 2005.

7 CMS changed the instructions for assessing functioning at discharge, effective April 1, 2004. Before this date, recording of patients' scores reflected their lowest functioning in the three days before discharge. Afterwards, patients' scores reflected functioning at discharge. The differences (discharge versus admission) increased after the change in April 2004 to 22.95 for all patients and 25.87 for patients discharged home.

8 Our Medicare margin estimates include data for HealthSouth, the largest chain of for-profit freestanding IRF facilities in the country, accounting for one-third of freestanding IRFs and one-sixth of total Medicare revenues in this sector. Our margin estimates for 2002 and 2003 include adjustments for missing depreciation and home office expense costs that were not claimed on the Medicare cost reports HealthSouth submitted to CMS. In 2004, problems potentially have persisted with these two sets of costs. Most of Medicare allowable depreciation expenses have not been claimed, as the company has had to restate the value of depreciable assets, a process that has not yet been completed. In addition, Medicare-allowable home office expenses have also likely been understated in 2004 reports, as the company has been guarded in how much of these expenses it has claimed as it has dealt with the aftermath of its accounting scandal.

References

Beeuwkes Buntin, M., N. Sood, P. Deb, et al. 2005. *Comparison of Medicare spending and outcomes for beneficiaries with lower extremity joint replacements.* Working paper for Medicare Payment Advisory Commission. Arlington, VA: RAND Corporation.

Birmingham Business Journal. 2004. Embattled HealthSouth Corp. will continue to make news in 2004. January 5.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2005. Medicare program; inpatient rehabilitation facility prospective payment system for FY 2006. Final rule. *Federal Register* 70, no. 156 (August 15): 47880–48006.

Centers for Medicare & Medicaid Services, Department of Health and Human Services. 2004. Medicare claims processing, transmittal 221, change request 3334. Baltimore: CMS. June 25.

Deutsch A., C. V. Granger, R. C. Fiedler, et al. 2005. Outcomes and reimbursement of inpatient rehabilitation facilities and subacute rehabilitation programs for Medicare beneficiaries with hip fracture. *Medical Care* 43, no. 9 (September): 892–901.

eRehabData®. 2005. Change in Medicare discharges for consistent sample of IRFs, 3rd quarter 2003, 2004, 2005. Silver Spring, MD: eRehab.

Government Accountability Office. 2005. *Medicare: More specific criteria needed to classify inpatient rehabilitation facilities.* Washington, DC: GAO.

HealthSouth Corporation. 2005. Business update, September 13, 2005. Birmingham, AL: HealthSouth.

Johnston, M., J. Foulkes, D. Johnston, et al. 1999. Impact on patients and partners of inpatient and extended cardiac counseling and rehabilitation: A controlled trial. *Psychosomatic Medicine* 61: 225–233.

New Mexico Business Weekly. 2004. Rehab hospital group sets up city operation. April 12.

Palmer Hill, S., J. Flynn, and E. J. P. Crawford. 2000. Early discharge following total knee replacement—a trial of patient satisfaction and outcomes using an orthopedic outreach team. *Journal of Orthopedic Nursing* 4: 121–126.

Stifel Nicolaus, Inc. 2005. Maintain buy rating following 2004 10K & proxy filing. Baltimore, MD: Stifel Nicolaus, Inc. December 5.